

Application No. 10/667,238
Response to Office Action of August 21, 2008

REMARKS/ARGUMENTS

Claims 2, 14-18, and 25 are cancelled. Claims 28-32 are added. Support for the amendment to Claim 1 is found at original Claim 2 and throughout the originally filed specification. Support for the amendment to Claim 19 is found at original Claims 2 and 14 and throughout the originally filed specification. Support for the amendment to Claim 20 is found at original Claim 2 and throughout the originally filed specification. Support for new Claims 28 and 29 is found at original Claims 10-13. Support for new Claims 30-32 is found at the paragraph bridging the bottom of page 4 and the top of page 5 of the originally filed specification. No new matter is believed to be added by the amendment or new claims.

Claims 1, 5, 7-9, 19-24, and 26-32 remain pending. Favorable reconsideration is respectfully requested in light of the comments below.

Applicants thank Examiner Fortuna for his detailed explanation of the rejections in the outstanding Office Action.

The rejection of Claim 1 under 35 U.S.C. §112, second paragraph, is believed to be obviated by the above amendment to Claim 1. Applicants have amended the claim to specify only starch and the confusing language is now separated, clarified,

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and presented in new Claims 28-29. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of Claim 14 under 35 U.S.C. §112, second paragraph, is believed to be obviated by the cancellation of this claim. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of Claims 1-2, 5, 7-9, and 14-27 under 35 U.S.C. §103 over US Patent No. 3,112,214 (US'214) is believed to be obviated by the amendment above combined with the remarks below. Further, new Claims 28-32 are believed to be patentable in view of the amendment above combined with the remarks below.

US'214, at best, discloses pre-treating a cellulose sheet with a first composition containing at least 1% borax, drying, then sizing the dried pre-treated sheet with a second composition containing a very specific modified starch derivative having from 0.01 to 3.0 acyclic vic.-glycol groups per anhydroglucose unit within the starch.

In direct contrast, the claimed invention relates to a paper or paperboard containing cellulosic fibers and a sizing composition comprising starch and a boron-containing compound at an amount that is equal to or less than about 7% by weight of the starch where greater than 50% of the total amount of starch and boron-containing

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compound is located at or near the surfaces of the web, as well as methods of making the same. In direct contrast, to US'214, the claimed invention specifies that the starch and the boron-containing compound are part of the same composition and not part of separate compositions.

US'214 does not disclose, much less suggest, the claimed invention. Applicants respectfully submit that these claims are allowable over US'214 because US'214 discloses that the sheet must be pre-treated and/or impregnated with a first aqueous solution of borax and then dried prior to surface sizing with a second composition containing the specific starch adduct (see Column 2, lines 9-13 and 58-66 of US'214).

Accordingly, US'214 discloses that the borax is applied via a first composition to the surface of the sheet and then dried and then the specific starch adduct is applied via a second composition to the dried sheet. Accordingly, US'214 discloses to apply the borax and specific starch adduct in separate and distinct compositions. This is in direct contrast to the claimed embodiments which require that the boron-containing compound and the starch part of a single composition. US'214 clearly teaches away from having the borax with the specific starch adduct in the same composition (see Column 2, lines 9-13 and 58-66 of US'214). Therefore, US'214 can not possibly provide motivation to the skilled artisan to modify the process it discloses towards the

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claimed invention and expect to achieve success. Accordingly, the Office has failed to carry its burden of providing a *prima facie* case of obviousness of the claimed invention; and, withdrawal of this ground of rejection is respectfully requested.

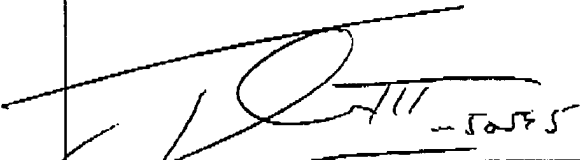
In light of all of the above, withdrawal of all the above rejections is respectfully requested.

Applicants respectfully submit that the present application is now in condition for allowance. Favorable reconsideration is respectfully requested. Should anything further be required to place this application in condition for allowance, the Examiner is requested to contact below-signed by telephone.

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Please charge the amount of \$130.00 required for the request for extension of time to our Deposit Account No. 09-0525. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 09-0525. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time.

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